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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/682,334 10/09/2003		Gary A. Evans	BPHOTO.012 9844			
7590 10/04/2005			EXAM	EXAMINER		
Duke W. Yee			GOLUB, M	GOLUB, MARCIA A		
Carstens, Yee &	Cahoon, LLP					
P.O. Box 80233	4	ART UNIT	PAPER NUMBER			
Dallas, TX 75	380	2828				

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

					AK			
Office Action Summary		Application	No.	Applicant(s)				
		10/682,334		EVANS ET AL.				
		Examiner		Art Unit				
		Marcia A. Go		2828				
Period fo	The MAILING DATE of this communication app or Reply	ears on the c	over sheet with the c	orrespondence ad	ldress			
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a sign of time may be available under the provisions of 37 CFR 1.1. SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS 36(a). In no event, will apply and will ex cause the applica	COMMUNICATION however, may a reply be time SIX (6) MONTHS from tion to become ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133).				
Status		•						
1)⊠	Responsive to communication(s) filed on <u>09 O</u>	october 2003.						
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)□	Since this application is in condition for allowar	nce except fo	r formal matters, pro	secution as to the	e merits is			
	closed in accordance with the practice under E	Ex parte Quay	de, 1935 C.D. 11, 45	53 O.G. 213.				
Disposit	ion of Claims							
5)⊠ 6)⊠ 7)⊠	4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) 10-14 is/are allowed. 6) ☐ Claim(s) 1,5,6,15,16,18 and 19 is/are rejected. 7) ☐ Claim(s) 2-4,7-9,17 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.							
Applicat	ion Papers							
9)⊠ 10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>09 October 2003</u> is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	: a)⊠ accep drawing(s) be tion is required	held in abeyance. See if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C	FR 1.121(d).			
Priority	under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachmer	• •	A	. ) Interview Summary	, (PT∩⊿13)				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4	Paper No(s)/Mail D	ate				
3) 🔯 Info	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date <u>10/9/2003</u> .	) 5 6	)  Notice of Informal F )  Other:	Patent Application (PT	O-152)			

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#### **DETAILED ACTION**

#### Specification

The disclosure is objected to because of the following informalities:

In paragraph 51 "Fig. 7a" should be replaced with "Fig. 7". In the last sentence of paragraph 53 the word "fore" should be replaced with the word "for".

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 15, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (U.S. Pub 2002/0126942 now a patent 6,775,427).

Regarding **claim 1**, Fig 1 of Evans discloses "A surface emitting semiconductor laser system, comprising: a first cavity and a second cavity sharing an axis [z axis], the first and second cavities overlapping at an out-coupling aperture [8]."

Regarding **claims 5 and 6**, Fig 2B of Evans discloses "A surface emitting semiconductor laser system, comprising: four cavities (8/11-13), each of the cavities resonating at a different central wavelength (7/61-63); wherein each of the four cavities overlaps a single out-coupling aperture [8]; wherein first and second cavities of the four cavities share a first axis [z axis], and wherein third and fourth cavities of the four cavities share a second axis [y axis]."

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Regarding **claims 15 and 16**, Fig 2B of Evans discloses "A semiconductor laser system, comprising: four cavities, each of the cavities overlapping at a first out-coupling aperture [8]; wherein first and second cavities of the four cavities share a first axis [z axis], and wherein third and fourth cavities share a second axis [y axis];

Regarding **claims 18 and 19**, Fig 2B of Evans discloses "A surface emitting semiconductor laser system, comprising: a first cavity and a second cavity sharing a first axis [z axis]; a third cavity and a fourth cavity sharing a second axis [y axis]; wherein the first, second, third, and fourth cavities intersect at an out-coupling aperture [8]; wherein the first cavity produces light of a first wavelength, the second cavity produces light of a second wavelength, the third cavity produces light of a third wavelength, and the fourth cavity produces light of a fourth wavelength." (7/61-63)

## Allowable Subject Matter

Claims 2-4, 7-9 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Evans discloses a surface emitting semiconductor laser device, comprising four cavities overlapping at OCG, each cavity having a reflector at one end. He does not disclose a second reflector at the other end of each cavity, where the individual cavities of each laser overlap. The aforementioned features in combination with the rest of the limitations of the claims are novel.

Claims 10-14 are allowed.

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The following is an examiner's statement of reasons for allowance: Evans discloses a surface emitting semiconductor laser device, comprising four cavities overlapping at OCG, each cavity having a reflector at one end. He does not disclose a second reflector at the other end of each cavity, where the individual cavities of each laser overlap. In addition, the reflectors positioned around the OCG are reflective of wavelength corresponding to one laser, but transmissive to wavelength corresponding to other laser on the same axis. The aforementioned features in combination with the rest of the limitations of the claims are novel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcia A. Golub whose telephone number is 571-272-0218. The examiner can normally be reached on M-F 8-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

之andra Smith Primarv Examiner

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